TABLE 21

State agency expenditures for R&D, by state, department or agency, and function of R&D: FY 2019 (Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other ^a
United States ^b	2,426,882,959	136,395,698	323,154,258	452,269,973	1,082,056,223	260,024,511	172,982,296
Alabama							
Commerce, Department of	19,763,230	0	255,807	9,403,795	1,080,000	3,601,526	5,422,102
Conservation and Natural	2,500,000	U	0	0	1,000,000	0	1,500,000
Resources, Department of: Wildlife and Freshwater Fisheries Division	2,908,673	0	0	2,908,673	0	0	0
Education, Department of	610,000	0	0	0	80,000	0	530,000
Forensic Sciences, Department of	238,454	0	0	0	0	0	238,454
Geological Survey	2,321,007	0	255,807	2,065,200	0	0	0
Marine Environmental Science Consortium, Dauphin Island Sea Lab	4,373,500	0	0	4,373,500	0	0	0
Supercomputer Authority	3,153,648	0	0	0	0	0	3,153,648
Transportation, Department of	3,657,948	0	0	56,422	0	3,601,526	0
Alaska	12,502,109	0	1,102,206	8,392,100	320,476	2,687,327	0
Energy Authority	102,206	0	102,206	0	0	0	0
Environmental Conservation, Department of	320,476	0	0	0	320,476	0	0
Housing Finance Corporation	1,000,000	0	1,000,000	0	0	0	0
Natural Resources, Division of Geological and Geophysical Surveys, Department of	8,392,100	0	0	8,392,100	0	0	0
Railroad Corporation	1,330,621	0	0	0	0	1,330,621	0
Transportation and Public Facilities, Department of	1,356,706	0	0	0	0	1,356,706	0
Arizona	17,332,044	1,054,913	0	1,077,891	13,843,058	1,356,182	0
Agriculture, Department of	1,176,374	1,054,913	0	121,461	0	0	0
Game and Fish Department	811,096	0	0	811,096	0	0	0
Health Services, Department of	13,843,058	0	0	0	13,843,058	0	0
Transportation, Department of	1,501,516	0	0	145,334	0	1,356,182	0
Arkansas	21,098,863	12,519,460	852,718	2,426,103	3,477,448	855,437	967,697
Beef Council	40,250	40,250	0	0	0	0	0
Corn and Grain Sorghum Board	965,000	965,000	0	0	0	0	0
Economic Development Commission	7,068,797	97,155	852,718	1,623,779	3,477,448	50,000	967,697
Game and Fish Commission	802,324	0	0	802,324	0	0	0
Rice Research and Promotion Board	8,623,500	8,623,500	0	0	0	0	0
Soybean Promotion Board	2,625,555	2,625,555	0	0	0	0	0
State Plant Board	118,000	118,000	0	0	0	0	0
Transportation, Department of	805,437	0	0	0	0	805,437	0
Wheat Promotion Board	50,000	50,000	0	0	0	0	0
California	526,918,585	7,004,454	202,262,559	40,709,827	225,535,054	34,906,443	16,500,248
Air Resources Board	15,271,608	0	0	15,271,608	0	0	0
Children and Families Commission	1,895,000	0	0	0	850,000	0	1,045,000
Conservation, Department of	184,000	0	0	184,000	0	0	0
Corrections and Rehabilitation, Department of	2,237,305	0	0	0	0	0	2,237,305
Covered California	3,489,452	0	0	0	3,489,452	0	0

TABLE 21

State agency expenditures for R&D, by state, department or agency, and function of R&D: FY 2019 (Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other ^a
Delta Stewardship Council	6,372,069	Agriculture	0	6,372,069	0	·	Other
Earthquake Authority	1,816,792	0	0	0,372,009	0	0	1,816,792
Energy Commission	165,441,000	0	165,441,000	0	0	0	1,010,792
Environmental Health Hazard Assessment, Office of	17,563,188	0	0	0	17,563,188	0	(
Food and Agriculture, Department of	4,871,361	4,871,361	0	0	0	0	(
Forestry and Fire Protection, Department of	3,665,406	0	0	3,665,406	0	0	(
Horse Racing Board	701,000	0	0	0	701,000	0	(
Housing and Community Development	50,000	0	0	0	0	0	50,000
Institute for Regenerative Medicine	184,982,872	0	0	0	184,982,872	0	(
Mental Health Services Oversight and Accountability Commission	2,500,000	0	0	0	2,500,000	0	(
Motor Vehicles, Department of	1,331,851	0	0	0	1,331,851	0	(
Parks and Recreation, Department of	1,500,000	0	0	1,500,000	0	0	(
Pesticide Regulation, Department of	12,746,628	2,133,093	0	1,892,221	8,721,314	0	(
Public Health, Department of	3,313,977	0	0	400,000	2,913,977	0	
Public Utilities Commission, Executive Division	37,221,559	0	36,821,559	0	0	0	400,000
Rehabilitation, Department of	10,800,000	0	0	0	0	0	10,800,000
Social Services, Department of	151,151	0	0	0	0	0	151,15
State Coastal Conservancy	838,000	0	0	838,000	0	0	
State Water Resources Control Board	8,768,254	0	0	6,286,854	2,481,400	0	
Transportation, Department of	34,906,443	0	0	0	0	34,906,443	
Water Resources, Department of	4,299,669	0	0	4,299,669	0	0	
Colorado	36,586,577	721,768	3,184,039	10,798,678	10,026,796	3,288,163	8,567,13
Agriculture, Department of	1,316,868	263,736	0	1,053,132	0	0	
Economic Development and International Trade, Office of	15,192,123	250,000	2,784,039	75,000	6,470,143	88,252	5,524,68
Higher Education Competitive, Research Authority	1,700,000	0	400,000	100,000	0	0	1,200,00
Higher Education, Department of	745,000	0	0	0	0	0	745,000
Natural Resources, Department of	7,567,568	0	0	7,542,124	0	5,000	20,44
Public Health and Environment, Department of	5,585,075	0	0	2,028,422	3,556,653		(
Public Safety, Department of	1,077,000	0	0	0	0		1,077,00
Transportation, Department of	3,194,911	0	0	0	0	3,194,911	l
Wine Industry Development Board	208,032	208,032	0	0	0	0	
Connecticut	57,241,037	3,856,987	0	10,599,160	29,921,946		9,579,52
Agricultural Experiment Station	12,445,226	3,856,987	0	3,975,471	4,612,768	0	(
Children and Families, Department of	81,949	0	0	0	0	0	81,949

TABLE 21

State agency expenditures for R&D, by state, department or agency, and function of R&D: FY 2019 (Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other ^a
Education, Department of	452,289	0	0	0	0	-	452,289
Energy and Environmental Protection, Department of	6,623,689	0	0	6,623,689	0	0	0
Innovation Inc.	26,858,089	0	0	0	17,812,803	0	9,045,286
Mental Health and Addiction Services, Department of	5,951,993	0	0	0	5,951,993	0	0
Public Health, Department of	114,974	0	0	0	114,974	0	0
Social Services, Department of	1,429,408	0	0	0	1,429,408	0	0
Transportation, Department of	3,283,420	0	0	0	0	3,283,420	0
Delaware	3,826,318	0	24,256	2,701,302	0	1,100,760	0
Geological Survey	2,441,975	0	0	2,441,975	0	0	0
Natural Resources and Environmental Control, Department of	259,327	0	0	259,327	0	0	0
Sustainable Energy Utility	24,256	0	24,256	0	0	0	0
Transportation, Department of	1,100,760	0	0	0	0	1,100,760	0
District of Columbia	4,222,412	0	0	2,000,000	1,716,302	422,412	83,698
Health, Department of	1,800,000	0	0	0	1,716,302	0	83,698
Transportation, Department of	422,412	0	0	0	0	422,412	0
Water and Sewer Authority	2,000,000	0	0	2,000,000	0	0	0
Florida	170,508,724	11,725,430	557,060	52,486,202	90,372,743	15,367,289	0
Agriculture and Consumer Services, Department of	12,822,683	11,075,430	557,060	272,569	917,624	0	0
Citrus, Department of	941,902	650,000	0	0	291,902	0	0
Environmental Protection, Department of	63,430	0	0	63,430	0	0	0
Fish and Wildlife Conservation Commission	52,150,203	0	0	52,150,203	0	0	0
Health, Department of	89,163,217	0	0	0	89,163,217	0	0
Space Florida	1,497,850	0	0	0	0	1,497,850	0
Transportation, Department of	13,869,439	0	0	0	0	13,869,439	0
Georgia	18,875,484	633,607	6,335,903	3,871,745	0	8,034,229	0
Natural Resources, Department of	1,956,371	0	0	1,956,371	0	0	0
Seed Development Commission	633,607	633,607	0	0	0	0	0
Southern States Energy Board	10,501,076	0	6,335,903	1,915,374	0	2,249,799	0
Transportation, Department of	5,784,430	0	0	0	0		0
Hawaii	7,325,591	1,680,702	2,510,732	895,592	0	802,000	1,436,565
Agriculture, Department of	680,702	680,702	0	0	0	0	0
Business, Economic Development, and Tourism, Department of	3,947,297	0	2,510,732	0	0	0	1,436,565
Land and Natural Resources, Department of	895,592	0	0	895,592	0	0	0
Natural Energy Laboratory	1,000,000	1,000,000	0	0	0	0	0
Transportation, Department of	802,000	0	0	0	0	802,000	0
Idaho	17,828,263	5,349,416	0	8,364,544	338,288	3,339,242	436,773
Agriculture, Department of	922,104	922,104	0	0	0	0	0
Alfalfa and Clover Seed Commission	15,000	15,000	0	0	0	0	0
Barley Commission	237,498	237,498	0	0	0	0	0

TABLE 21

State agency expenditures for R&D, by state, department or agency, and function of R&D: FY 2019 (Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other ^a
Bean Commission	26,400	26,400	0	0	0		Carici
Beef Council	16,500	16,500	0	0	0	0	(
Commerce, Department of	1,016,728	241,667	0	0	338,288	0	436,773
Dairy West	2,000,000	2,000,000	0	0	330,200	0	430,773
Environmental Quality,	2,000,000	2,000,000	0	0	0	0	
Department of	460,000	0	0	460,000	0	0	(
Fish and Game, Department of	7,904,544	0	0	7,904,544	0	0	(
Honey Commission	1,635	1,635	0	0	0	0	(
Oilseed Commission	61,565	61,565	0	0	0	0	(
Pea and Lentil Commission	80,836	80,836	0	0	0	0	(
Potato Commission	850,000	850,000	0	0	0	0	(
Transportation Department	3,339,242	0	0	0	0	3,339,242	
Wheat Commission	896,211	896,211	0	0	0	0	
Illinois	17,548,556	3,989,560	0	0	15,596	9,458,562	4,084,83
Children and Family Services, Department of	3,848,765	0	0	0	0	0	3,848,76
Human Services, Department of	236,073	0	0	0	0	0	236,073
Nutrient Research and Education	3,989,560	3,989,560	0	0	0	0	(
Public Health, Department of	15,596	0	0	0	15,596	0	
Transportation, Department of	9,458,562	0	0	0	0	9,458,562	
Indiana	12,357,151	141,876	268,086	0	600,000	8,495,933	2,851,25
Economic Development Corporation	3,936,062	41,876	268,086	0	600,000	174,844	2,851,256
Natural Resources, Department of	100,000	100,000	0	0	0	0	(
Transportation, Department of	8,321,089	0	0	0	0	8,321,089	
lowa	9,386,675	0	0	3,797,923	61,000	5,190,691	337,06
Human Rights, Criminal and Juvenile Justice Planning, Division of	433,061	0	0	0	61,000	35,000	337,06
Natural Resources, Department of	3,797,923	0	0	3,797,923	0	0	
Transportation, Department of	5,155,691	0	0	0	0	5,155,691	
Kansas	12,355,458	3,998,895	0	3,645,223	0	3,714,875	996,46
Corn Commission	850,050	850,050	0	0	0	0	
Grain Sorghum Commission	444,660	444,660	0	0	0	0	
Soybean Commission	1,463,379	1,463,379	0	0	0	0	
State Board of Regents	996,465	0	0	0	0	0	996,46
Transportation, Department of	3,714,875	0	0	0	0	3,714,875	
Water Office	465,725	0	0	465,725	0	0	
Wheat Commission	1,240,806	1,240,806	0	0	0	0	
Wildlife, Parks, and Tours	3,179,498	0	0	3,179,498	0		
Kentucky	26,668,173	627,270	2,020,000	2,531,000	14,469,601	7,020,302	
Behavioral Health, Developmental and Intellectual Disabilities	67,500	0	0	0	67,500	0	
Economic Development, Cabinet for	4,040,000	0	2,020,000	0	2,020,000	0	(
Environmental Protection, Department of	100,000	0	0	100,000	0	0	(

TABLE 21

State agency expenditures for R&D, by state, department or agency, and function of R&D: FY 2019 (Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other ^a
Fish and Wildlife Resources, Department of	2,000,000	0	0	2,000,000	0	0	0
Horse Racing Commission	293,414	27,270	0	30,000	236,144	0	C
Nature Preserves, Office of	401,000	0	0	401,000	0	0	0
Postsecondary Education, Council on	10,559,315	0	0	0	10,559,315	0	C
Public Health, Department for	1,586,642	0	0	0	1,586,642	0	C
Soybean Promotion Board	600,000	600,000	0	0	0	0	
Transportation Cabinet	7,020,302	0	0	0	0	7,020,302	(
Louisiana	35,142,225	270,090	2,875,376	11,751,729	1,532,501	10,000,000	8,712,529
Agriculture and Forestry, Department of	26,840	26,840	0	0	0	0	0
Board of Regents	15,162,504	243,250	2,875,376	2,227,437	1,532,501	0	8,283,940
Coastal Protection and Restoration Authority	3,368,965	0	0	3,368,965	0	0	C
Education, Department of	428,589	0	0	0	0	0	428,589
Transportation and Development, Department of	10,000,000	0	0	0	0	10,000,000	0
Wildlife and Fisheries, Department of	6,155,327	0	0	6,155,327	0	0	C
Maine	32,592,625	7,182,948	0	12,055,909	2,467,740	1,136,000	9,750,028
Agriculture, Conservation and Forestry, Department of	650,363	325,133	0	325,230	0	0	0
Inland Fisheries and Wildlife, Department of	719,045	0	0	719,045	0	0	0
Marine Resources, Department of	2,341,500	0	0	2,341,500	0	0	0
Technology Institute	27,745,717	6,857,815	0	8,670,134	2,467,740	0	9,750,028
Transportation, Department of	1,136,000	0	0	0	0	1,136,000	C
Maryland	29,107,768	357,910	1,181,872	1,625,725	22,520,611	1,735,096	1,686,554
Education, Department of	638,402	0	0	0	0	0	638,402
Energy Administration	1,032,429	0	1,025,000	7,429	0	0	C
Health and Mental Hygiene, Department of	13,000,000	0	0	0	13,000,000	0	С
Natural Resources, Department of	1,476,425	354,160	131,872	990,393	0	0	С
Technology Development Corporation	10,620,513	3,750	25,000	3,750	9,520,611	19,250	1,048,152
Transportation, Department of	2,339,999	0	0	624,153	0	1,715,846	C
Massachusetts	28,425,439	50,000	5,049,247	8,938,925	6,632,267	4,425,000	3,330,000
Clean Energy Technology Center	4,999,247	0	4,999,247	0	0	0	С
Environmental Protection, Department of	288,925	0	0	288,925	0	0	C
Fish and Game, Department of	8,550,000	50,000	0	8,500,000	0	0	(
Gaming Commission	2,125,000		0	0	2,095,000	0	30,000
Life Sciences Center	1,000,000		0	0	1,000,000	0	
Massventures	3,300,000		0	0	0	-	3,300,000
Mental Health, Department of	1,300,000		0	0	1,300,000	0	(
Public Health, Department of	2,237,267	0	0	0	2,237,267	0	(
Transportation, Department of	4,425,000		0	0	0		С
Water Resources Authority	200,000	0	50,000	150,000	0	0	0

TABLE 21

State agency expenditures for R&D, by state, department or agency, and function of R&D: FY 2019 (Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other ^a
Michigan	8,023,318	1,246,732	0	1,555,898	88,488	5,132,200	0
Agriculture and Rural Development, Department of	1,246,732	1,246,732	0	0	0	0	0
Environmental, Great Lakes and Energy, Department of	639,875	0	0	639,875	0	0	0
Health and Human Services	88,488	0	0	0	88,488	0	C
Natural Resources, Department of	916,023	0	0	916,023	0	0	0
Transportation, Department of	5,132,200	0	0	0	0	5,132,200	C
Minnesota	20,150,907	3,701,150	0	5,356,934	0	11,092,823	0
Agriculture, Department of	6,177,224	3,701,150	0	2,476,074	0	0	0
Forest Resources Council	140,000	0	0	140,000	0	0	C
Natural Resources, Department of	1,462,164	0	0	1,462,164	0	0	C
Pollution Control Agency	100,277	0	0	100,277	0	0	C
Transportation, Department of	12,271,242	0	0	1,178,419	0	11,092,823	C
Mississippi	12,170,278	599,632	0	5,579,050	0	5,991,596	C
Agriculture and Commerce, Department of	97,454	97,454	0	0	0	0	O
Environmental Quality, Department of	1,157,390	0	0	1,157,390	0	0	(
Gulf States Marine Fisheries Commission	661,034	502,178	0	158,856	0	0	(
Marine Resources, Department of	2,141,085	0	0	2,141,085	0	0	(
Transportation, Department of	5,991,596	0	0	0	0	5,991,596	C
Wildlife, Fisheries, and Parks, Department of	2,121,719	0	0	2,121,719	0	0	(
Missouri	15,055,845	1,153,575	0	11,968,316	103,760	1,830,194	C
Agriculture, Department of	79,966	66,800	0	13,166	0	0	C
Conservation, Department of	11,163,017	0	0	11,163,017	0	0	C
Health and Senior Services	28,760	0	0	0	28,760	0	C
Natural Resources, Department of	792,133	0	0	792,133	0	0	С
Technology Corporation	615,000	140,000	0	0	75,000	400,000	
Transportation, Department of	1,430,194	0	0	0	0	1,430,194	(
Wine and Grape Board	946,775	946,775	0	0	0	0	
Montana	8,794,140	3,132,570	0	4,146,533	311,826	820,527	382,684
Agriculture, Department of	3,132,570	3,132,570	0	0	0	0	(
Environmental Quality, Department of	153,592	0	0	153,592	0	0	(
Fish, Wildlife and Parks	3,833,321	0	0	3,833,321	0	0	(
Natural Resources and Conservation, Department of	59,620	0	0	59,620	0	0	(
Research and Commercialization, Board of	794,510	0	0	100,000	311,826	0	382,684
Transportation, Department of	820,527	0	0	0	0	· ·	C
Nebraska	28,167,688	2,851,678	4,000	4,757,681	18,986,705	1,409,861	157,763
Agriculture, Department of	1,193,067	1,193,067	0	0	0	0	0
Corn Board	1,107,026	697,047	0	409,979	0		0
Dry Bean Commission	192,000	192,000	0	0	0	0	0

TABLE 21

State agency expenditures for R&D, by state, department or agency, and function of R&D: FY 2019 (Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other ^a
Economic Development, Department of	1,111,752	430,078	0	100,000	423,911	0	157,763
Game and Parks Commission	2,857,952	0	0	2,857,952	0	0	0
Grain Sorghum Board	15,000	11,000	4,000	0	0	0	0
Health and Human Services	18,562,794	0	0	0	18,562,794	0	0
Natural Resources, Department of	1,346,572	0	0	1,346,572	0	0	0
Transportation, Department of	1,453,039	0	0	43,178	0	1,409,861	0
Wheat Board	328,486	328,486	0	0	0	0	0
Nevada	7,871,899	184,774	0	128,914	0	973,452	6,584,759
Agriculture, Department of	184,774	184,774	0	0	0	0	0
Economic Development, Governor's office of	6,584,759	0	0	0	0	0	6,584,759
Transportation, Department of	1,102,366	0	0	128,914	0	973,452	0
New Hampshire	8,432,696	114,949	8,938	101,215	0	807,378	7,400,216
Agriculture, Markets and Food, Department of	154,699	114,949	0	39,750	0	0	0
Business and Economic Affairs	7,275,000	0	0	0	0	0	7,275,000
Natural & Cultural Resources, Department of	61,465	0	0	61,465	0	0	0
Transportation, Department of	941,532	0	8,938	0	0	807,378	125,216
New Jersey	23,886,758	0	0	2,192,254	15,865,431	2,717,094	3,111,979
Community Affairs, Department of	310,000	0	0	0	0	0	310,000
Corrections, Department of	301,979	0	0	0	0	0	301,979
Environmental Protection, Department of	2,474,000	0	0	1,545,000	929,000	0	0
Health, Department of	1,936,431	0	0	0	1,936,431	0	0
Pinelands Commission	647,254	0	0	647,254	0	0	0
Research Initiatives, Office of	13,000,000	0	0	0	13,000,000	0	0
Secretary of Higher Education, Office of	2,500,000	0	0	0	0	0	2,500,000
Transit, New Jersey	103,000	0	0	0	0	103,000	0
Transportation, Department of	2,614,094	0	0	0	0	2,614,094	0
New Mexico	3,585,944	0	82,970	2,108,672	0	1,377,302	17,000
Cultural Affairs, Department of	17,000	0	0	0	0	0	17,000
Game and Fish, Department of	1,000,000	0	0	1,000,000	0	0	0
Transportation, Department of	1,659,400	0	82,970	199,128	0	1,377,302	0
Western State Air Resources Council	909,544	0	0	909,544	0	0	0
New York	448,501,735	10,612,279	51,407,945	33,457,115	315,479,125	8,842,589	28,702,682
Agriculture and Markets, Department of	9,864,543	9,504,543	0	360,000	0	0	0
Economic Development, Department of	39,780,251	246,490	5,352,405	356,094	5,367,044	0	28,458,218
Energy Research and Development Authority	53,546,621	0	38,192,117	10,934,755	0	4,419,749	0
Environmental Conservation, Department of	8,942,166	0	0	8,942,166	0	0	0
Health, Department of	82,781,352	368,437	0	2,210,623	80,202,292		0
Mental Health, Office of	156,275,133	0	0	0	156,275,133	0	0

TABLE 21

State agency expenditures for R&D, by state, department or agency, and function of R&D: FY 2019 (Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other ^a
People with Developmental Disabilities, Office of	1,849,940	0	0	0	1,605,476	0	244,464
Power Authority	8,707,710	104,360	7,863,423	630,958	108,969	0	(
Roswell Park Cancer Institute	71,920,211	0	0	0	71,920,211	0	C
State Museum	10,022,519	0	0	10,022,519	0	0	(
Thoroughbred Breeding and Development Fund Corp.	388,449	388,449	0	0	0	0	(
Transportation, Department of	4,422,840	0	0	0	0	4,422,840	(
North Carolina	32,754,090	14,132,932	1,656,680	7,935,915	778,247	7,959,645	290,671
Agriculture and Consumer Services, Department of	15,422,911	13,922,911	1,500,000	0	0	0	C
Environmental Quality, Department of	3,460,387	0	0	3,460,387	0	0	C
Golden Leaf, The	65,000	65,000	0	0	0	0	C
Natural and Cultural Resources, Department of	3,473,399	0	0	3,431,450	0	0	41,949
Science, Technology & Innovation, Board of	1,201,990	98,959	150,000	0	778,247	0	174,784
Transportation, Department of	9,010,403	0	6,680	1,044,078	0	7,959,645	C
Wine and Grape Growers Council	120,000	46,062	0	0	0	0	73,938
North Dakota	12,140,358	2,998,472	6,229,265	1,546,256	29,510	1,336,855	(
Agriculture, Department of	299,153	299,153	0	0	0	0	(
Dairy Promotion Commission	155,170	155,170	0	0	0	0	C
Dry Pea and Lentil Commission	135,023	135,023	0	0	0	0	C
Game and Fish, Department of	1,375,151	0	0	1,375,151	0	0	C
Industrial Commission	6,226,265	0	6,226,265	0	0	0	C
Soybean Council	1,573,679	1,312,380	3,000	171,105	29,510	57,684	C
Transportation, Department of	1,279,171	0	0	0	0	1,279,171	C
Wheat Commission	1,096,746	1,096,746	0	0	0	0	C
Ohio	97,758,379	0	14,557,578	58,098,202	3,200,453	6,886,766	15,015,380
Development Services Agency	85,774,800	0	14,557,578	53,616,065	3,200,453	324	14,400,380
Education, Department of	615,000	0	0	0	0	0	615,000
Environmental Protection Agency	20,174	0	0	20,174	0	0	(
Natural Resources, Department of	2,940,286	0	0	2,940,286	0	0	C
Transportation, Department of	6,886,442	0	0	0	0	6,886,442	C
Water Development Authority	1,521,677	0	0	1,521,677	0	0	C
Oklahoma	29,607,888	1,058,791	684,211	3,697,616	16,263,121	6,849,411	1,054,738
Advancement of Science and Technology, Center for the	5,753,552	423,987	684,211	112,333	3,324,582	287,945	920,494
Agriculture, Food, and Forestry, Department of	634,804	634,804	0	0	0	0	C
Environmental Quality, Department of	80,399	0	0	0	30,399	50,000	C
Health, Department of	608,140	0	0	0	608,140	0	(
Human Services, Department of	134,244	0	0	0	0	0	134,244
Tobacco Settlement Endowment Trust	12,300,000	0	0	0	12,300,000	0	C
Transportation, Department of	6,511,466	0	0	0	0	6,511,466	0

TABLE 21

State agency expenditures for R&D, by state, department or agency, and function of R&D: FY 2019 (Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other ^a
Wildlife Conservation, Department of	3,585,283	0	0	3,585,283	0	0	(
Oregon	44,222,659	1,638,762	4,550,000	19,896,508	6,000,000	5,411,595	6,725,794
Agriculture, Department of	388,762	388,762	0	0	0	0	(
Business Oregon	14,800,000	1,250,000	4,550,000	2,250,000	6,000,000	750,000	(
Education, Department of	657,595	0	0	0	0	0	657,595
Environmental Quality, Department of	458,000	0	0	0	0	0	458,000
Fish and Wildlife, Department of	14,235,414	0	0	14,235,414	0	0	(
Forestry, Department of	522,777	0	0	522,777	0	0	(
Geology and Mineral Industries, Department of	814,431	0	0	739,960	0	0	74,471
Human Services, Department of	5,535,728	0	0	0	0	0	5,535,728
Transportation, Department of	5,090,034	0	0	428,439	0	4,661,595	(
Water Resources Department	810,484	0	0	810,484	0	0	(
Watershed Enhancement Board	909,434	0	0	909,434	0	0	(
Pennsylvania	85,050,999	3,187,000	5,323,743	8,385,384	53,335,777	3,913,899	10,905,196
Agriculture, Department of	2,187,000	2,187,000	0	0	0	0	(
Community and Economic Development, Department of	21,600,000	1,000,000	5,000,000	0	5,000,000	0	10,600,000
Conservation and Natural Resources, Department of	42,124	0	0	42,124	0	0	C
Environmental Protection, Department of	1,445,473	0	323,743	1,121,730	0	0	C
Fish and Boat Commission	131,845	0	0	131,845	0	0	(
Game Commission	9,287,658	0	0	6,939,685	2,042,777	0	305,196
Health, Department of	46,293,000	0	0	0	46,293,000	0	(
Susquehanna River Basin Commission	150,000	0	0	150,000	0	0	(
Transportation, Department of	3,913,899	0	0	0	0	3,913,899	(
Rhode Island	5,512,380	49,042	0	3,507,663	150,000	1,225,000	580,675
Commerce Corporation	1,203,652	49,042	0	423,935	150,000	0	580,675
Environmental Management, Department of	3,028,728	0	0	3,028,728	0	0	(
Transportation, Department of	1,225,000	0	0	0	0	1,225,000	(
Water Resources Board	55,000	0	0	55,000	0	-	
South Carolina	46,983,243	1,013,153	86,506	28,245,560	14,541,188	2,159,379	937,457
Agriculture, Department of	1,035,394	970,156	0	0	0	0	65,238
Disabilities and Special Needs, Department of	12,226,376	0	0	0	12,226,376	0	C
Health and Environmental Control, Department of	1,585,652	0	0	0	1,585,652	0	C
Mental Health, Department of	100,884	0	0	0	100,884	0	(
Natural Resources, Department of	26,062,760	0	0	26,062,760	0	0	(
Public Service Authority	30,000	0	30,000	0	0	0	(
Research Authority	1,401,205	36,500	0	5,000	628,276	0	731,429
Sea Grant Consortium	2,381,593	6,497	56,506	2,177,800	0	-	140,790
Transportation, Department of	2,159,379	0	0	0	0	2,159,379	C

TABLE 21

State agency expenditures for R&D, by state, department or agency, and function of R&D: FY 2019 (Dollars)

State and department or	All R&D	A	Fm	Environment and natural	l l a a le la	Tuonguantatian	Otha
agency	expenditures	Agriculture	Energy	resources	Health	Transportation	Other ^a
South Dakota	2,953,214	1,690,563	39,853	0	0		0
Corn Utilization Council	250,000	250,000	0	0	0	-	0
Oilseeds Council	216,845	216,845	0	0	0	-	0
Pulse Crop Council	13,352	13,352	0	0	0	0	0
Science and Technology Authority	39,853	0	39,853	0	0	0	0
Soybean Research and Promotion Council	718,122	718,122	0	0	0	0	0
Transportation, Department of	1,222,798	0	0	0	0	1,222,798	0
Weed and Pest Control Commission	45,314	45,314	0	0	0	0	0
Wheat Commission	446,930	446,930	0	0	0	0	0
Tennessee	7,439,395	0	106,514	906,097	0	3,107,664	3,319,120
Education, Department of	3,319,120	0	0	0	0	0	3,319,120
Environment and Conservation, Department of	843,184	0	106,514	736,670	0	0	0
Geological Survey	169,427	0	0	169,427	0	0	0
Transportation, Department of	3,107,664	0	0	0	0	3,107,664	0
Texas	233,030,466	1,229,300	0	9,797,876	204,708,613	17,294,677	0
Agriculture, Department of	1,229,300	1,229,300	0	0	0	0	0
Alzheimer's Research and Care Consortium (TARCC)	3,204,342	0	0	0	3,204,342	0	0
Cancer Prevention and Research Institute	201,159,271	0	0	0	201,159,271	0	0
Environmental Quality, Commission on	1,687,165	0	0	1,687,165	0	0	0
Parks and Wildlife Department	7,378,821	0	0	7,378,821	0	0	0
State Health Services, Department of	345,000	0	0	0	345,000	0	0
Transportation, Department of	17,294,677	0	0	0	0	17,294,677	0
Water Development Board	731,890	0	0	731,890	0	0	0
Utah	7,985,508	0	0	4,537,659	12,780	3,435,069	0
Environmental Quality, Department of	416,398	0	0	416,398	0	0	0
Health, Department of	12,780	0	0	0	12,780	0	0
Natural Resources, Department of	4,121,261	0	0	4,121,261	0	0	0
Transportation, Department of	3,435,069	0	0	0	0	3,435,069	0
Vermont	2,730,591	0	0	308,227	210,747	2,211,617	0
Agriculture, Food, and Markets, Agency of	308,227	0	0	308,227	0	0	0
Human Services, Agency of	210,747	0	0	0	210,747	0	0
Transportation, Agency of	2,211,617	0	0	0	0	2,211,617	0
Virginia	29,951,353	2,765,452	350,000	7,210,949	3,183,007	12,889,933	3,552,012
Aging and Rehabilitation, Department of	134,914	0	0	0	134,914	0	0
Agriculture and Consumer Services, Department of	2,615,452	2,615,452	0	0	0	0	0
Commonwealth Health Research Board	1,080,163	0	0	0	1,080,163	0	0
Environmental Quality, Department of	287,560	0	0	287,560	0	0	0

TABLE 21

State agency expenditures for R&D, by state, department or agency, and function of R&D: FY 2019 (Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other ^a
Forensic Science, Department of	854,800	0	0	0	0	0	854,800
Forestry, Department of	467,501	0	0	467,501	0	0	(
Foundation for Healthy Youth	858,392	0	0	0	858,392	0	(
Game and Inland Fisheries, Department of	2,296,869	0	0	2,296,869	0	0	(
Innovative Technology, Center for	4,416,750	150,000	350,000	160,000	1,109,538	100,000	2,547,212
Marine Resources Commission	2,471,043	0	0	2,471,043	0	0	C
Mines, Minerals and Energy, Department of	655,308	0	0	655,308	0	0	(
Natural History, Museum of	872,668	0	0	872,668	0	0	(
Social Services, Department of	150,000	0	0	0	0	0	150,000
Transportation, Department of	12,789,933	0	0	0	0	12,789,933	(
Washington	51,963,060	17,797,227	7,621,218	16,415,784	1,188,510	5,596,000	3,344,321
Agriculture, Department of	2,767,808	2,767,808	0	0	0	0,000,000	(
Alfalfa Seed Commission	34,000	34,000	0	0	0	0	(
Asparagus Commission	74,166	74,166	0	0	0	0	(
Blueberry Commission	252,000	252,000	0	0	0	0	(
		252,000	-	0	0	-	
Cranhary Commission	5,826,443	-	5,826,443	0	0	0	(
Cranberry Commission	6,000	6,000	0	-		0	
Dairy Products Commission	15,000	15,000	0	0	0	0	(
Ecology, Department of	882,120	0	0	882,120	0	0	(
Fish and Wildlife, Department of	8,390,579	0	1,794,775	6,595,804	0	0	(
Fruit Commission	306,223	226,568	0	0	79,655	0	(
Grain Commission	2,224,046	2,224,046	0	0	0	0	(
Health, Department of	1,108,855	0	0	0	1,108,855	0	(
Hop Commission	168,357	168,357	0	0	0	0	
Labor and Industries, Department of	3,344,321	0	0	0	0	0	3,344,32
Mint Commission	50,382	50,382	0	0	0	0	(
Natural Resources, Department of	8,307,815	0	0	8,307,815	0	0	(
Oilseeds Commission	10,000	10,000	0	0	0	0	(
Pesticide Registration, Commission on	455,000	455,000	0	0	0	0	(
Potato Commission	953,022	953,022	0	0	0	0	(
Puget Sound Partnership	630,045	0	0	630,045	0	0	
Pulse Crop Commission	187,098	187,098	0	0	0	0	(
Red Raspberry Commission	349,396	349,396	0	0	0	0	
Seed Potato Commission	16,003	16,003	0	0	0	0	
Transportation, Department of	5,596,000	0	0	0	0	5,596,000	(
Tree Fruit Research Commission	9,668,382	9,668,382	0	0	0	0	(
Turfgrass Seed Commission	100,815	100,815	0	0	0	0	(
Wine Commission	239,184	239,184	0	0	0	0	
West Virginia	11,068,061	25,000	1,703,058	4,141,682	1,296,852	2,124,711	1,776,758
Geological and Economic Survey	1,713,935	0	1,064,096	202,437	1,290,032	0	447,402
Higher Education Policy Commission	5,571,715	0	638,962	2,314,545	1,296,852	0	1,321,356

TABLE 21

State agency expenditures for R&D, by state, department or agency, and function of R&D: FY 2019 (Dollars)

State and department or agency	All R&D expenditures	Agriculture	Energy	Environment and natural resources	Health	Transportation	Other ^a
Justice and Community Services, Division of	8,000	0	0	0	0	0	8,000
Natural Resources, Department of	1,649,700	25,000	0	1,624,700	0	0	0
Transportation, Department of	2,124,711	0	0	0	0	2,124,711	0
Wisconsin	17,473,890	3,518,097	0	6,060,492	1,140,656	3,754,645	3,000,000
Agriculture, Trade and Consumer Protection, Department of	2,768,097	2,768,097	0	0	0	0	0
Economic Development Corporation	4,750,000	750,000	0	0	1,000,000	0	3,000,000
Natural Resources, Department of	6,201,148	0	0	6,060,492	140,656	0	0
Transportation, Department of	3,754,645	0	0	0	0	3,754,645	0
Wyoming	6,002,910	529,282	261,918	2,152,148	250,000	1,428,942	1,380,620
Agriculture, Department of	380,882	380,882	0	0	0	0	0
Business Council	2,466,307	148,400	169,936	348,800	250,000	209,971	1,339,200
Enterprise Technology Services	41,420	0	0	0	0	0	41,420
Game and Fish Department	1,110,856	0	0	1,110,856	0	0	0
State Engineer, Office of	250,000	0	0	250,000	0	0	0
State Geological Survey	183,963	0	91,982	91,981	0	0	0
Transportation, Department of	1,218,971	0	0	0	0	1,218,971	0
Water Development Office	350,511	0	0	350,511	0	0	0

^a Other functions include, but are not limited to, corrections, criminal justice, education, forensic science, labor, public safety, and social services.

Source(s):

National Center for Science and Engineering Statistics, Survey of State Government Research and Development, FY 2019.

 $^{^{\}rm b}$ U.S. total reflects all 50 states and the District of Columbia.